

**Mendocino County Department of Agriculture**  
**Pesticide Use Enforcement**  
**Work Plan**  
**Fiscal Year (FY) 07/08**

**Introduction**

Mendocino County is a very large and geographically diverse county. Potter Valley, Redwood Valley, Hopland, Ukiah and Anderson Valley are the main agricultural growing regions excluding timber. The top crops are wine grapes, timber and pears. The types of pest control performed here are Structural Branch I, II and III, Landscape Maintenance Gardening, Field Fumigation, and Agricultural Production, which include Property Owner/Operators, Vineyard Management Companies and Agricultural Pest Control Operators. There are many small, owner-operated vineyards. There are several registered Pest Control Advisors, and a few Pesticide Dealers.

**Resources**

When fully staffed the department employs three Agricultural Biologist/Weights and Measures Specialists.

Inspectors work in both the Ag and Weights and Measures programs. Two inspectors share the majority of the pesticide use enforcement (PUE) program. The third inspector works primarily in other programs, but assists with the PUE program workload by issuing operator identification (ID) numbers, administering private applicator certification exams, performing investigations, and reviewing pesticide use reports.

The Assistant Commissioner also contributes work hours to the PUE program by sharing in the investigations, putting together the Notices of Proposed Action (NOPAs) permit issuance, record keeping and advocating cases.

The following table breaks down the percent of work hours that each inspector and the Assistant Commissioner contributed to the PUE program in FY 06/07:

PUE Program Manager/Inspector (1)	35%
Assistant Commissioner	25%
Inspector (2)	35%
Inspector (3)	5%

**Restricted Materials Permitting**

**Permit Evaluation**

Approximately 37 Restricted Material Permits (RMPs) are issued annually.

95% of permits are renewals for mainly perennial crops, while the other 5% of permits are for one-time applications, such as preplant soil fumigation.

The majority of restricted material permits are issued for paraquat, 2,4-D, strychnine and azinphos-methyl (Guthion):

<b>Restricted Material</b>	<b># of Valid Permits in FY 05/06</b>	<b># of Valid Permits in FY 06/07</b>
Paraquat	60	43
2,4-D	60	42
Strychnine	38	30
Azinphos-methyl	20	17

Less than 10 permits each were issued for the following restricted materials: 1,3-D (Telone), Zinc phosphide, fenamiphos (Nemacur), Methomyl (Lannate), Metam sodium, Section 18 Spinosad, Streptomycin, Checkmite +, Aluminum phosphide (Phostoxin), Dicamba, Botran Dust, Methyl bromide, Trimec, Diazinon and Carbaryl.

Approximately 44 Notices of Intent (NOIs) were logged in FY 06/07, excluding structural fumigation notices. A pre-application site inspection (pre-site) was performed on 4 restricted material applications, exceeding the 5% required.

Restricted material permits are issued by any of the four licensed staff members.

A checklist is placed at the front of each permit file to document the issuing inspector's review of the permit.

Permits are issued to certified applicators only. A private applicator exam is administered when necessary, prior to permit issuance. Most private applicators renew with continuing education credits.

A Letter of Authorization from the property owner/operator is required in order to issue a permit to an applicant who is not the property owner/operator.

Permit expiration dates are matched to the expiration of the applicant's certification.

Once issued, the permit is valid for a maximum of three years.

A General Restricted Material Permit Condition form is attached to all permits.

Additional specific permit conditions are attached for use of 2, 4-D, Telone, Metam sodium, Methyl bromide, Paraquat and Nemacur.

The applicant must provide site maps indicating the location of all sensitive sites within ¼ mile of the application site.

Maps are reviewed and discussed with applicant regarding application methods, weather conditions at site, mitigation methods and other application-related criteria.

Decision to issue permit is based on map, discussion with applicant's knowledge of the area, and conditions at the site.

Notice of intent requirement and procedure are explained to applicant.

If employees work as handlers and/or field workers, the applicant is provided with training requirements and materials.

Blank use report forms are also provided to applicant.

#### **a. Strengths**

When fully staffed there are three licensed inspectors in addition to the Assistant Commissioner who are qualified to issue restricted materials permits.

The minimum 5% requirement for pre-application inspections of scheduled restricted material applications is met annually. In FY 06/07, 9% of the Notices of Intent received a pre-application inspection.

The majority of permits are renewals for perennial crops.

During FY 06/07, permit holders that had not used a restricted material for some time were asked to remove it from their permit. Many of these permits had only the one restricted material and therefore became operator identification numbers. This significantly reduced the number of operators with a restricted materials permit.

Vikane, Paraquat, Guthion, Strychnine and 2, 4-D are the five restricted materials used most often. These chemicals can be focused on in order to identify specific hazards they present when used in the county.

The restricted material permit checklist used during permit issuance aids the inspector in thoroughly reviewing the permit prior to issue.

Ability to greatly improve map quality and permit review process by set up and implementation of new Geographic Information Systems (GIS) mapping software.

Section, Township and Range data accuracy has greatly improved due to the completion of the Ukiah, Hopland and Anderson Valley mapping project.

#### **b. Weaknesses**

Only 1/3 of the permits have been renewed using the checklist at this time. Approximately 2/3 of the permits still need to have the permittee information, sites and maps updated.

Conversion of permits from Restricted Materials Permit Program (RMPP) to GIS software will be a considerable amount of work that must be done over time because of lack of staff resources.

Appointments for permit issue/renewal are not required.

Due to limited staff and time constraints it is difficult to thoroughly review permits when they are requested on a walk-in basis. The inspector reviewing the permit may primarily work in other programs and therefore may not be as familiar with restricted material permitting requirements as the PUE Program Manager or Assistant Commissioner.

### **c. Goal or Objective**

In FY 06/07, we made an effort to reduce the number of RMPs issued and/or converted them to Operator ID Numbers. Many growers have kept restricted materials on their permit just in case they need them, but may not have used them in years. Many growers kept restricted materials listed so that they may be eligible for a three-year permit. By querying each grower, we were able to significantly reduce RMP's to be more in line with actual use. As a part of this process, we were able to get growers to properly dispose of some of these materials, so that they did not pose a danger in storage.

We strive to assure that the permit review process is thorough, and that all pertinent information is collected and documented prior to issuance of permit. The entire process, including the NOI, assures that restricted material applications are made in a manner that complies with all applicable laws and regulations, while eliminating potential for damage to the environment, the public's health, and those involved in the application.

### **d. Deliverables**

Restricted material permit files will be flagged with a different folder label to distinguish them from Operator ID files. Implement immediately.

The RMP checklist was used to update 1/3 of the permits during renewal in FY 06/07. The final 1/3 of permits will be updated in FY 07/08.

December 2007: Formulate a plan for the transition from RMPP to GIS-based permitting.

January 2008: Implement Phase 1 of GIS plan. Complete Phase 1 by end FY 07/08.

Require permit holders to make an appointment for renewing their restricted material permit in order to provide the inspector with adequate time for a thorough review and update of the permit.

New restricted material permit applicants will also need to make an appointment to allow for adequate review of the new permit application and private applicator certification if needed. Walk-ins will continue to be helped as time allows. After a preliminary assessment of the applicant's needs, an appointment will be scheduled for the permit issuance and/or PAC exam if more time is needed.

Continue to identify permits with materials that have not been used and work to have them removed by permittee.

### **e. Measure of Success**

Review new and renewed restricted material permit files in March 2008. Check for use of checklist and thorough review and update of permit prior to issuance. Upon completion of the permitting season of 2008, all of the total restricted material permits should be thoroughly updated and reviewed including the use of the checklist.

## **Site Monitoring Plan**

### **Plan Development**

There were approximately 666 annual sites in FY 06/07, approximately 2/3 are forest/timberland sites.

NOIs received in FY 06/07 were for the following sites/crops and restricted materials:

Site/Crop	# of NOIs	Restricted Material Used	Seasonal Time of Use
Structural Fumigation	Approximately 150	Sulfuryl Fluoride	All Year
Wine Grapes	9	Paraquat 8 2,4-D 1	February – July
Apples	12	Guthion 11 Sevin 1	May – July
Turf/Sod	4	Dicamba 4	April – August
Peas, Strawberry	6	Lannate	July – October
Preplant Soil Fumigation	1	Telone	September – November
Forest/Timberland	5	2, 4-D	May – June
Olive	1	Spinosad	September – October
Pasture/Hay	6	2, 4-D	April – June

Sites to be monitored are based on the following criteria:

1. Pesticide used and application method
2. Location in regard to sensitive sites
3. Owner/Operator compliance history
4. Employees as handlers
5. Staff availability

NOIs are received by phone, answering machine, fax or in person. Staff person receiving NOI takes down the information and gives the NOI to the PUE program manager or Assistant Commissioner. The NOI is recorded in the NOI log when it is reviewed. NOI is initialed to indicate approval.

Pre-application site inspections are performed on all ag-use fumigations, and on other NOIs as staffing allows.

The total of pre-sites performed is periodically checked against the 5% of NOI requirement.

#### **a. Strengths**

Excluding structural NOIs, the 44 NOIs received in FY 06/07 was a low number.

Only 9 different restricted materials were used in 9 different crops/sites.

Majority of NOIs were for Guthion, Paraquat, 2,4-D, Lannate, Telone and Dicamba.

NOIs were mostly for wine grape, pear, apple, turf/sod, miscellaneous vegetable and forest sites.

Most sites are planted to perennial crops resulting in minimal cropping pattern and/or adjacent environmental changes to monitor.

Completed portions of our mapping project are used as reference in NOI review/approval process and to facilitate pre-site inspections.

A pre-site is performed on all ag-use fumigations.

#### **b. Weaknesses**

There is currently no structural fumigation (Branch 1) log to track the number of NOIs for Vikane or methyl bromide.

NOIs are left on answering machine after normal business hours. This often does not give inspector enough time to evaluate/approve the application, perform a pre-site inspection or a pesticide use inspection. Geographical size of the county makes it difficult to do inspections in a timely manner.

#### **c. Goal or Objective**

To assure that site monitoring for restricted material applications meets the criteria listed above and utilizes our resources most effectively for the purpose of protecting the public health and the environment.

#### **d. Deliverables**

Continue to perform pre-sites on all ag-use fumigations.

In 06/07, a new NOI log form was created to capture more information. In addition to the proposed restricted material application information, we included name of person leaving NOI, time called, and how the NOI was submitted, i.e., by phone, in person, answering machine, or fax. Two more check off boxes were added: One for 24 hr in advance compliance and a second box for indicating that a pre-site has been performed.

Permittees that fail to submit a NOI a full 24 hours in advance will receive the appropriate enforcement response.

#### **e. Measure of Success**

End of FY 07/08, review NOI log for 5% requirement

End of FY 07/08, review NOI log for compliance with 24-hour advance compliance. Check to see if the changes made to NOI log improved ability to track compliance.

Improved compliance with the 24-hour advance notice will also be measured by the inspector's ability to perform pre-sites based more on the site monitoring criteria than on the time allowed for inspection prior to application.

## **Compliance Monitoring**

### **Comprehensive Inspection Plan Evaluation**

Inspections are mainly performed by the two PUE inspectors. The Assistant Commissioner contributes by performing some inspections, when necessary.

Inspections are usually performed Monday through Friday during regular business hours. During the peak pesticide application time of late spring/ early summer, the PUE inspectors also conduct early morning inspections from about 6 to 8 A.M. A few weekend inspections are done on ag-use fumigations and other targeted applications/operators.

The majority of inspections are done in February through August. This is the primary pesticide application season for apples, pears and wine grapes. The PUE inspectors devote 2 to 4 days per week to surveillance and inspections.

Structural fumigation inspections and record inspections are conducted throughout the year.

Inspections are performed in 5 different geographic regions: Hopland, Ukiah, Anderson Valley, Redwood Valley and Potter Valley.

When selecting a pesticide application to inspect, the PUE program manager considers several variables: Last time operator was inspected, operators with employee handlers or fieldworkers, type of inspection, pesticide being applied, application/inspection site and operator's compliance history.

#### **a. Strengths**

A variety of pest control takes place in Mendocino County. This department does a good job of dividing resources to adequately cover agricultural (ag) and structural applications. With regard to inspections, growers with employees are given higher priority over owner/operator-applied pesticides.

#### **b. Weaknesses**

Given the size of the county, and a limited staff, it is difficult to equally cover all portions of the county. Often, operators that are close to the office are inspected more frequently because of visibility, geographical and time constraints.

#### **c. Goal or Objective**

Establish surveillance schedule that covers all crops and agricultural areas of the county. Train new inspector and delegate inspection responsibilities to him/her.

#### **d. Deliverables**

Prompt follow up of violations. Inspection reports that represent a cross section of the types of pest control applications that take place in Mendocino, i.e. forestry, pears, wine grapes, structural etc.

#### **e. Measure of Success**

Success will be measured by improvements in levels of compliance as determined by compiling inspection reports at end of fiscal year.

## **Investigation Response and Reporting Improvement**

### **Evaluation**

Investigations are often the result of a complaint that was received. This requires that an inspector be dispatched immediately to the scene. In these circumstances, the inspector that takes the original call becomes the lead inspector for the case. When there is an option, the biologists are dispatched before the Assistant Commissioner, when possible. The Assistant Commissioner will be dispatched when inspectors are not available. This system allows for the Assistant Commissioner to advocate the case if there is an action taken.

#### **a. Strengths**

Three of the four available staff for investigations are fully trained and experienced PUE inspectors. The fourth staff member primarily does weights and measures, but can assist in investigations if called upon. Even though the staff is small, we are versatile, and can respond quickly. This is often important if the violation is ongoing, or physical sampling is required. All investigative reports are reviewed by DPR staff prior to finalization.

#### **b. Weaknesses**

Mendocino County is very large geographically. It can take a couple hours to reach certain parts of the county by car. Because of this, if the violation is ongoing, it has often stopped by the time we arrive, and therefore we must rely on eyewitnesses and residue sampling results. Occasionally, the lab makes crucial errors with regard to documenting and handling the sample. Also, it may take several months or more to get the results of residue analysis, delaying enforcement action or even the decision to take enforcement action.

#### **c. Goal or Objective**

The goal is to collect evidence and determine if a violation occurred. If there is evidence to indicate that a violation did occur, the goal is then to collect good evidence that will be admissible in an administrative hearing. This includes following established protocols for the collecting of physical samples. When conducting an investigation, inspectors are taught to anticipate potential violations and collect evidence accordingly. Knowledge of the specific code section and the type of evidence needed to prove a violation of such section should be at the forefront of an inspectors mind when conducting the investigation.

#### **d. Deliverables**

The deliverables are clear concise investigative reports that are submitted within the investigative deadline. All investigations are conducted following DPR's "Investigative Procedures Manual" (PUE Program Standards Compendium, Vol. #5).

#### **e. Measure of Success**

The measure of success for investigations and their reports is the success rates of subsequent enforcement actions. Since the investigative report is the core of the County's evidence, the success in an administrative penalty action is dependent on a well-written report. Therefore, a direct correlation exists between a well-conducted investigation with report and success in these enforcement actions.



Of the three enforcement actions in Mendocino County in FY 06/07, one was stipulated to, and the other two were decided in favor of the county in an administrative civil penalty hearing. Neither of these two decisions were appealed by the respondent.

### **Enforcement Response**

#### **Enforcement Response Evaluation**

Enforcement Response is now codified in 3 CCR section 6128. Response to all violations is now determined by following this code section.

##### **a. Strength**

All enforcement actions are taken in a timely manner. Over the past six years, Mendocino County has prevailed in all administrative civil penalty hearings in which we were involved. All appeals have been upheld.

##### **b. Weaknesses**

With the advent of the Enforcement Response Policy, we have noticed a trend in our county where growers are stipulating to violations less often and requesting more hearings. Often the grower has a lawyer, or legal representation. County biologists are not, as a rule, trained as lawyers, but are expected to “compete” with them in these hearings. This often requires hours and hours of preparation for what often appear to be minor violations with small fines. Time spent preparing for hearings takes away from time in the field doing inspections. With limited resources available, there could well be more time spent prosecuting violations than performing field inspections.

##### **c. Goal or Objective**

The goal is to conduct an objective, thorough investigation, provide the respondent with due process, and be well prepared if a hearing is requested.

##### **d. Deliverables**

Deliverables are enforcement actions initiated and completed within two years of the violation, and following 3 CCR section 6128.

##### **e. Measure of Success**

The success rate of enforcement actions is a direct measure of the success of the county’s enforcement response.